

ABSTRACT

A performance enhancing and force absorbing mouthguard adapted to fit the upper teeth of the mouth of an athlete wherein the mouthguard is of a composite material. The first internal layer is a nonsoftenable flexible framework which will permit the mouthguard to
5 hold its shape during fitting as well as to absorb and dissipate significant impact conveyed to the upper teeth. The framework includes hard, durable bite plate wedges which lower the condyle from the temporomandibular joint in a fulcrum action to place the lower jaw in an optimum condition preventing impingement upon the nerves and arteries as well as spacing the upper and lower teeth apart. Elastomeric traction pads are on the bottom of the
10 mouthguard and are grippingly engaged by the posterior teeth of the lower jaw. The elastomeric pads extend forwardly to form an anterior impact brace on the front of the mouthguard. While the framework and traction pads are mechanically interlocked, a softenable material is placed over the mouthguard excepting the contact portions of the traction pads and anterior impact brace to encapsulate the mouthguard and to permit custom
15 fitting.